

# ABSTRACT

A computer device for controlling applications critical with regard to safety is provided, which computer device has at least one processor unit and at least one self-test unit assigned to the processor unit, a memory unit for storing programs and process data, a memory management unit for controlling memory accesses in the computer device, an error detection unit for detecting errors in the memory unit, and connection means for connecting the processor units to one another and to the memory management unit. The processor units are positioned together with the memory unit on a shared chip surface area.